1. SCOPE

This hardware specification applies to the TEAC CD-W512E CD-RW drive (hereinafter referred to as the unit or drive).

2. GENERAL

(1) General specifications

General specifications

Model name	CD-W512E
TEAC P/N	1977070A-02
Applicable safety standards	UL, CSA, TÜV
Data transfer rate	16.6M bytes/s Max. 33.3M bytes/s Max.
Data capacity	650MB
Average access time	85ms typ., by TEAC standards
Disc rotational speed (32X CAV speed mode)	6,850min^{-1} (Approx.)
Signal interface	IDE (ATAPI)
Power supplies	+5VDC, +12VDC
Loading mechanism	Disc tray
Starting time	13sec or less (Avg), by TEAC standards
Applicable disc format	CD-DA, CD-ROM Mode 1, CD-ROM XA Mode 2 (Form 1, Form 2), Multi-session Photo CD, CD-I, Video CD, CD PLUS
Write methods	Disc at once, Track at once, Session at once, Paket write
Recordable disc	CD-R/RW disc (Refer to item 4.6)
Readable disc	Press CD, Recorded CD-R/RW
Front bezel and escutcheon	PS2 color
Eject button	PS2 color
Tray	PS2 color
LED indicator color	Green (Left LED), Green (Right LED)
Audio headphone Line-out	0.6 ±0.3V at 32Ω 0.7 ±0.3V at 47kΩ
Factory-preset strap settings	Master
Laser Class	Class 1 Laser Product

(2) Care of the drive

What is stated in this specification must be observed for the user to get the most out of the drive.
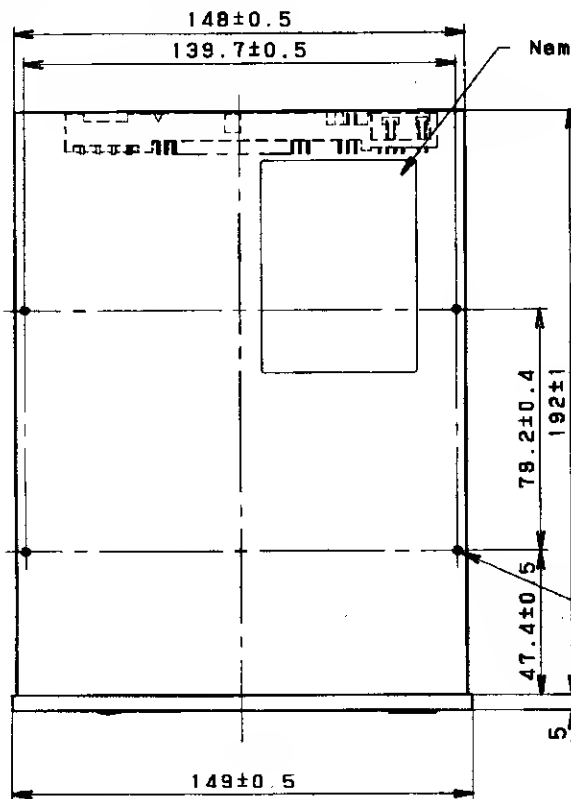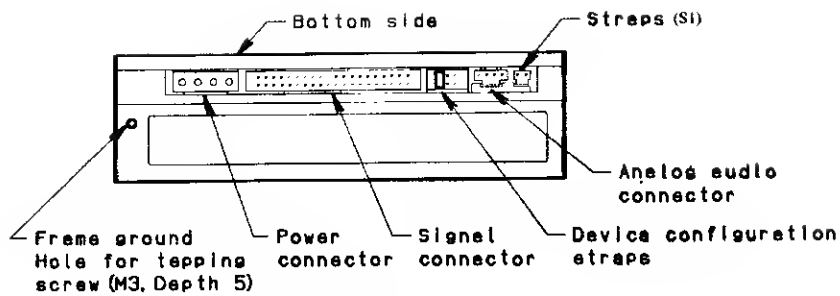
Especially, the following precautions must be observed for quality of recording.

(a) Be careful about the use of the disc

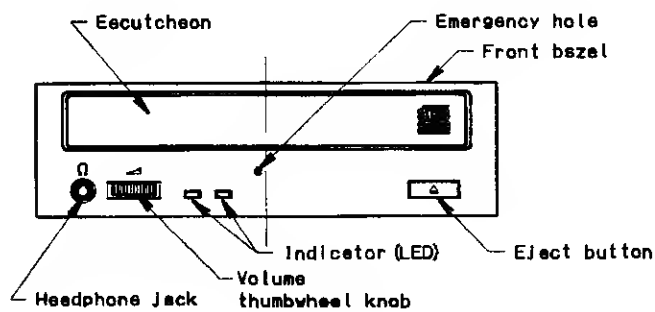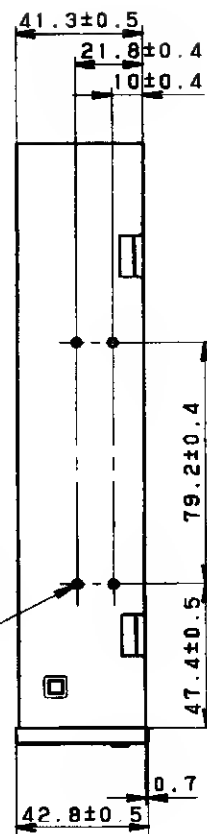What is stated by the disc manufacturer must be observed for the usage.

(b) Don't let the disc and the tray become dirty.

• Check to see that the disc is bereft of scratch, dust, fingerprint or any other dirt.

Bottom side — Straps (SI)

Analog audio connector

Frame ground
Hole for tapping
screw (M3, Depth 5)

Power connector
Signal connector
Device configuration straps

Nameplate

148±0.5
139.7±0.5

41.3±0.5
21.8±0.4
10±0.4

79.2±0.4
192±1
47.4±0.5
5

12-M3 tapped hole for installation (Depth 5) (Bottom x4, each side x4)

79.2±0.4
47.4±0.5

149±0.5

42.8±0.5
0.7

Escutcheon
Emergency hole
Front bezel

Ω

Indicator (LED)
Eject button

Headphone jack
Volume thumbwheel knob

(Units:mm)

External view of the unit

7. RELIABILITY

(1) Mean time between failures (MTBF)

           : 100,000 POH or more (for typical operating duty)(Tentative)

(2) Mean time to repair (MTTR) : 30minutes, typ. (Tentative)

(3) Error rate

 (a) Data read error rate   : Block/10^{12} bit (MODE 1 and MODE 2 Form 1)

           Block/10^9 bit (MODE 2 Form 2 and CD-DA)

(4) Designed life   : 5 years

(5) Safety standards

 (a) Approved by the UL standards.

 (b) Approved by the CSA standards.

 (c) Approved by the TÜV standards.

 (d) Comformable to 21 CFR subchapter J

(6) EMC

 (a) FCC part 15B Class B DOC system

9. FRAME GROUND

The frame of the CD-RW drive is electrically connected to 0VDC.

10. POWER INTERFACE

10.1 Power Supply Used

The following specifications apply to the power interface connector of the CD-RW drive.

(1) DC +12V
    (a) Operating voltage range   : ± 10% (10.8 ~ 13.2V)
    (b) Allowable ripple voltage   : 100mVp-p or less (including spike noise)
    (c) Current consumption   : Refer to Table 10.1-1. (excluding 10ms or less)

### (Table 10.1-1) Current consumption (Tentative)

	12V	5V
Standby	170mA	600mA
Read	1.1A	1.4A
Start	1.7A	1.0A
Seek	1.8A	1.4A
Write	1.8A	1.3A

(2) DC +5V
    (a) Operating voltage range   : ± 5% (4.75 ~ 5.25V)
    (b) Allowable ripple voltage   : 100mVp-p or less (including spike noise)
    (c) Current consumption   : Refer to Table 10.1-1. (excluding 10ms or less)

(3) Power sequence
    The sequence shall be as shown below.

T1, T2, T3 and T4 shall be within 50 ms.
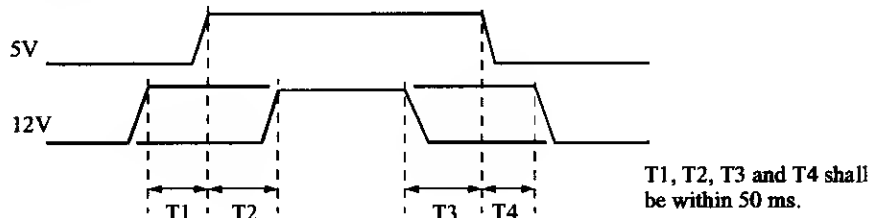
10.2 Power Interface Connector and Cable

(1) Power interface connector
    (a) CD-RW drive side connector : 53109-0410 MOLEX or equivalent
    (b) Number of pins   : 4
    (c) Protection method for mis-connection: Mechanical protection by the shape of the connector's housing.
    (d) Connector pin diagram   : Refer to Fig.10.2-1.
    (e) Connector layout   : Refer to Fig.10.2-1.
    (f) Pin number chart   : Refer to Table 10.2-1.
    (g) Cable side matched connector: 8981-4P MOLEX
             Matched pin   : 8980-3L MOLEX or equivalent.

(b) Pin number chart

(Table 5.3.1-1) Audio line output connector pin number

Pin No.	Audio signal
1	L signal
2	GND
3	GND
4	R signal

(c) Cable side matched connector:51030-0420 MOLEX or equivalent

   Headphone output

(1) Performance
   (a) Level   : 0.6 ± 0.3Vrms (1kHz, ATT 0dB)
   (b) Volume control   : Continuous (thumbwheel knob)
   (c) Load   : 32Ω
(2) Connector
   3.5mm dia. stereo mini-headphone jack

Safety Precautions

TEAC CD Rewritable (CD-RW) Drives are high-precision electronic devices. Do not use them in any manner other than as specified in this manual. Please read this manual in its entirety before you begin the installation procedure. Use of controls, adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent fire or shock, do not expose the unit to moisture or rain.

To prevent electrical shock, do not attempt to disassemble the CD-RW Drive. Refer servicing to authorized personnel.

The CD-RW Drive utilizes a laser beam that can be harmful to the eyes. Do not disassemble the cabinet or unit. Do not attempt to look through the front panel or into the unit while the power is turned on.

A user who changes or modifies the unit or operating procedures specified herein without express written approval by the manufacturer will void user authority to operate the equipment.

Specifications and features subject to change without notice or obligation.

FCC Radio Frequency Interference Regulations

Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions contained in this manual, may cause harmful interference to radio and television communications. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Subpart J of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. To ensure compliance with FCC rules, the cable that connects the unit to the computer must be a shielded interface cable.

Note: Connecting this device to peripheral devices that do not comply with Class B requirements or using an unshielded peripheral cable could result in interference to radio or television reception. To ensure that the use of this product does not contribute to interference, use a shielded interface cable.

If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment off and on), the user may try to correct the interference by one of more of the following measures:

• Reorient or relocate the receiving antenna.
• Move the device and the receiver farther apart.
• Connect the equipment to an electrical outlet on a different circuit than the receiver.
• Consult the dealer or an experienced audio television technician.

Also, the following booklet may prove helpful: How to Identify and Resolve Radio-TV Interference Problems. It is available from the U.S. Government Printing Office, Washington, D.C. 20402, stock number 004-000-00345-4.

The user is cautioned that any changes or modifications not expressly approved by TEAC America, Inc. could void the user's warranty.

CD-W512E

(CD-RW)

User's Manual

12X10X32

TEAC

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About This Manual

This *TEAC CD-Rewritable (CD-RW) Drive User's Manual* explains how to install and operate the TEAC CD-RW Drive. It is divided into the following main sections:

Chapter 1. Introduction: This chapter introduces the CD-RW Drive and describes shipping package contents and recommended system requirements.

Chapter 2. Configuring and Installing the CD-RW Drive: This chapter explains how to configure the CD-RW drive's CSEL/Slave/Master setting by positioning a jumper pin. It also explains how to install the CD-RW Drive in your computer and make the appropriate hardware connections.

Chapter 3. Installing the Recording Software: This chapter explains how to install the pre-mastering and other software included on the *TEAC CDR Software Suite* CD-ROM.

Appendix A. About CD-R and CD-RW Discs: This appendix contains information about media, formats, and loading and ejecting discs.

Appendix B. Specifications: This appendix provides technical specifications for TEAC CD-RW Drives.

Appendix C. Technical Support: This appendix provides technical support listings for TEAC in North America, Europe, Australia, and Asia.

Registration Information

There is no need to register any portion of this kit. TEAC provides 100% support for the drive and the Adaptec software. Refer to "Appendix C. Technical Support" on page 28 if you wish to contact TEAC.

Product Warranty Information

This TEAC CD-RW Drive features a one year warranty from the date of purchase.

Table of Contents

List of Figures

Chapter 1. Introduction

Thank you for purchasing a TEAC CD-RW Drive kit.

The TEAC CD-RW Drive can write to CD-R discs at a maximum of 12X speed, re-write to CD-RW discs at 10X speed, and read CD-ROM discs at 32X speed. (It is also capable of operating at slower speeds, if preferred.)

CD-R discs enable you to create audio or data discs for permanent archival storage. They cannot be overwritten. You can overwrite CD-Rewritable (CD-RW) discs, typically up to 1,000 times.

The TEAC CD-RW Drive is designed for use in IBM PC or compatible computers. It features a 5.25-inch standard chassis and a powered tray for convenient disc loading. Please refer to "Appendix B. Specifications" on page 27 for detailed information.

Recommended System Requirements

❑ IBM PC-compatible computer, Pentium 300MHz or higher

❑ CD-ROM drive with DAE support for disc-to-disc audio recording

❑ One available 5.25 inch drive bay

❑ 64MB of RAM

❑ A hard drive that meets or exceeds the following minimum specifications:

    ❑ 1GB hard disk space (or more)

    ❑ 1.2MB/second data transfer rate (or faster)

    ❑ 12ms average access time (or less)

❑ Sufficient hard disk space for software installation (see the documentation for the recording software)

❑ Windows 95/98/2000-Professional and NT 4.0

> *Note: The Adaptec software included in this package will work on systems on which Windows 2000-Professional has been fully installed. It will not work on systems on which Windows 2000 has been installed by updating earlier versions of Windows (i.e., Windows 95/98). This software will not work with Windows 2000 Server and Advanced Server.*

CD-RW Package Contents

The CD-RW Drive kit includes the following items (see Figure 1)

- ❑ TEAC CD-Rewritable (CD-RW) Drive
- ❑ CD-ROM containing Adaptec software, including:
    - ❑ Adaptec Easy CD Creator premastering software (Version 4.02d or higher)
    - ❑ Adaptec Direct CD drag & drop software (Version 3.01d or higher)
- ❑ One blank CD-R disc
- ❑ One blank CD-RW disc
- ❑ Interface cable (ribbon cable)
- ❑ Audio cable (to connect internally to your PC)
- ❑ Mounting screws (not shown)
- ❑ *TEAC CD-Rewritable (CD-RW) Drive User's Manual* (this booklet)

TEAC CD-RW Drive

recording software
and blank discs
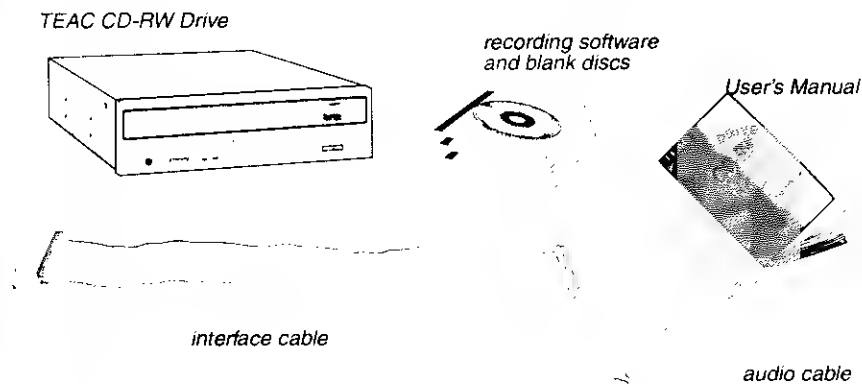
User's Manual

interface cable

audio cable

Figure 1. CD-RW Drive Kit Package Contents

> *Note: If any of these items is missing from the package, please contact the vendor immediately to have the kit replaced.*

Front Panel

Figure 2 illustrates the front panel of the CD-RW Drive.

① disc tray

② headphone jack

③ volume control

④ LED status indicators

⑤ emergency eject mechanism opening
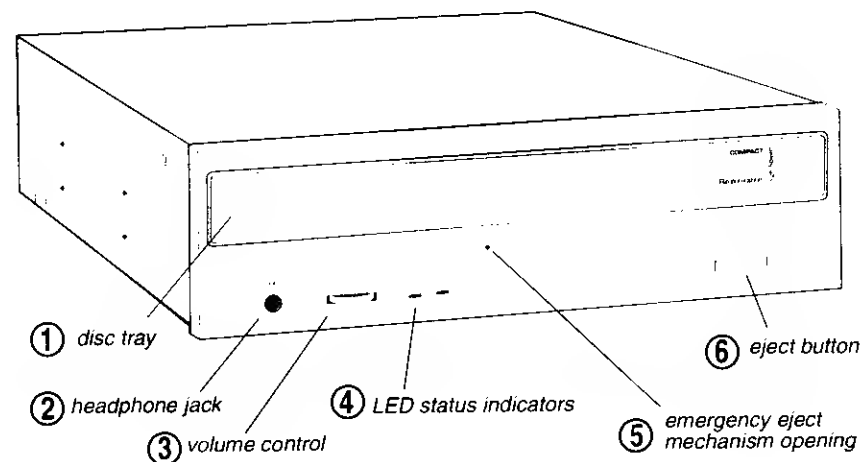
⑥ eject button

Figure 2. Front Panel of the CD-RW Drive

① **disc tray:** Use the disc tray to load CDs into the drive. You can open the tray by pressing the eject button or by using the emergency eject mechanism. You can close the tray by pressing the eject button.

> *Note: We strongly recommend that you do not push the tray in to close it. Please press the eject button to eject or retract the tray.*

② **headphone jack:** You can connect headphones or external speakers to this jack to listen to an audio CD being played on your TEAC drive. Use a 3.5mm stereo mini-plug. For external speakers, connect a stereo adapter to split the output into separate cables for the left and right channels. Such adapters convert a male stereo mini-jack to two female phono jacks.

③ **volume control:** Use the volume control to adjust the volume. Turning the control to the right increases the volume. (Lower the volume before you start a CD-ROM audio program to protect your hearing and the audio speakers.)

④ **LED indicators:** The drive features two LED indicator lights on the front panel. Various operations are indicated as per the following table:

Operation	Right LED	Left LED
At tray loading	green LED flashes	off
At tray eject	green LED flashes	off
During write	off	green LED flashes
During audio play	green LED flashes	off
During seek/data transfer	green LED lights	off

⑤ **emergency eject mechanism:** If the eject button fails, you can *turn off the power to the CD-RW drive* and insert a small, thin rod (such as a straightened paper clip) into the emergency eject mechanism opening and press firmly to eject the disc.

> **Caution:** *Do not attempt to use the emergency eject mechanism when either the Power or Busy indicator is lit or you may seriously damage the disc or the CD-RW Drive.*

⑥ **eject button:** Press this button to open or close the disc tray. (Some CD-ROM titles disable the manual eject button and rely on software commands to eject the disc. Refer to the documentation for these titles for more information.)

Rear Panel

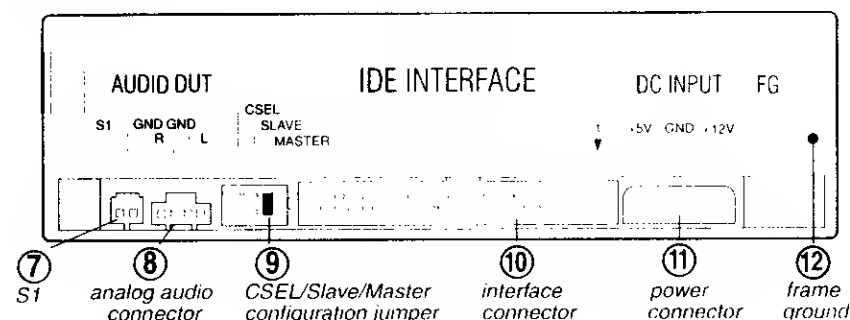Figure 3 illustrates the rear panel of the CD-RW Drive.

Figure 3. Rear Panel of the CD-RW Drive

⑦ **S1:** Reserved for factory use only.

⑧ **analog audio output connector:** You can connect this connector to the audio input connector on a sound card. Pin assignments are described in the following table.

Pin Number	Audio Signal
1	Left signal
2	Ground
3	Ground
4	Right signal

⑨ **CSEL/Slave/Master configuration jumper:** The CD-RW Drive includes three pairs of jumper pins on the rear panel that allow you to set the drive to CSEL, Slave, or Master mode. (For more information, see "Configuring the CD-RW Drive" on page 7.)

⑩ **interface connector:** Use the included IDE interface ribbon cable to connect the CD-RW drive to an IDE interface in your computer. (For more information, see "Chapter 2. Configuring and Installing the CD-RW Drive" on page 7.)

⑪ **power connector:** Connect the power connector to the +5VDC and +12VDC power sources. The +5VDC terminal is on the left as you face the rear panel; the +12VDC terminal is on the right. The two center terminals are ground terminals. (For more information, see "Installing the CD-RW Drive" on page 8).

⑫ **FG:** Frame ground. This is a ground connection for the CD-RW Drive.

Chapter 2. Configuring and Installing the CD-RW Drive

This chapter explains how to configure and install the TEAC CD-RW Drive in your computer.

Configuring the CD-RW Drive

The CD-RW Drive features three pairs of jumper pins on the rear panel. By placing the jumper on the appropriate pair of pins, you can set the drive to Master, Slave, or CSEL mode.
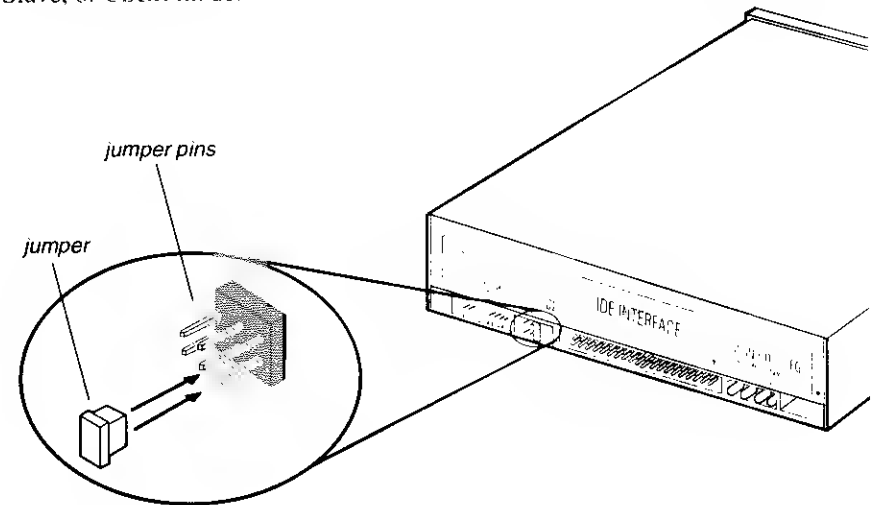
jumper pins

jumper

IDE INTERFACE

Figure 4. Jumper Pins on Rear Panel

The Master/Slave/CSEL jumper configuration of your TEAC CD-RW drive will depend on whether or not you have an IDE CD-ROM/DVD drive installed in your system. The following section will guide you through most typical system configurations.
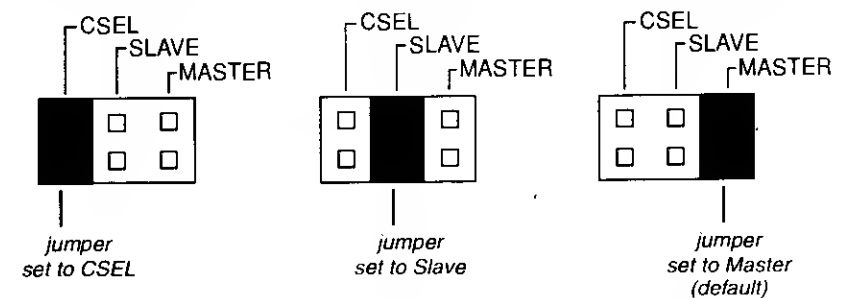
CSEL
SLAVE
MASTER

jumper
set to CSEL

CSEL
SLAVE
MASTER

jumper
set to Slave

CSEL
SLAVE
MASTER

jumper
set to Master
(default)

Figure 5. CSEL, Slave, and Master Jumper Pin Settings

Installing the CD-RW Drive

1. **Turn off the power to the computer system and any external devices connected to it.**

2. **Touch the exposed metal frame of the computer to ground yourself.**

   This will prevent damage to the computer or CD-RW drive that may be caused by a discharge of static electricity.

3. **Remove your computer's cover, faceplate, or 5.25-inch bay cover, as well as mounting clips, screws, and retaining brackets.**

   > *Note: If you have a SCSI CD-ROM drive or no IDE CD-ROM/DVD drive installed in your system, please continue with Step 4. If you have an IDE CD-ROM/DVD drive installed in your system, skip step 4 and continue with Step 5.*

4. **If you have a SCSI CD-ROM drive or no IDE CD-ROM/DVD drive installed on your system, do the following:**

   4a) Confirm that the jumper on the rear panel of the CD-RW drive is configured to its default setting of Master.

   4b) Slide the CD-RW drive into the empty 5.25" drive bay. Install the CD-RW drive in your personal computer in a horizontal orientation (within ±10° of horizontal). The eject button should be located on the right side of the unit. Secure the drive using the included 3x5mm mounting screws.

   > **Warning:** *Do not use mounting screws longer than the included 3x5mm screws to secure the CD-RW drive or you may damage the unit.*
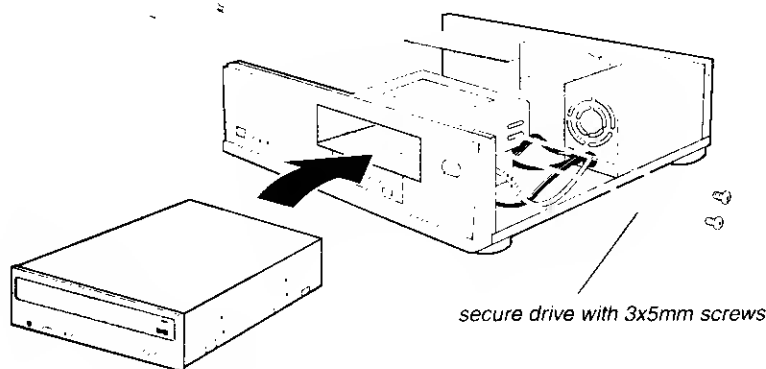

secure drive with 3x5mm screws

Figure 6. Installing the CD-RW Drive in a Computer

   4c) Locate the secondary IDE connector on your system's motherboard and connect one end of the IDE interface cable provided with your TEAC kit.

   Be certain to connect Pin-1 of the interface cable to Pin-1 on the secondary IDE connector on the motherboard. (Pin-1 on interface cable is usually designated by a color strip along one edge of the cable. Also, the interface ribbon cable connector may feature a tab on one side. Insert the cable so that the tab aligns with the notch on the interface connector. Do not use excessive force while trying to insert the cable into position).

   4d) Connect the opposite end of the interface ribbon cable to the interface connector on the rear panel of the CD-RW drive.
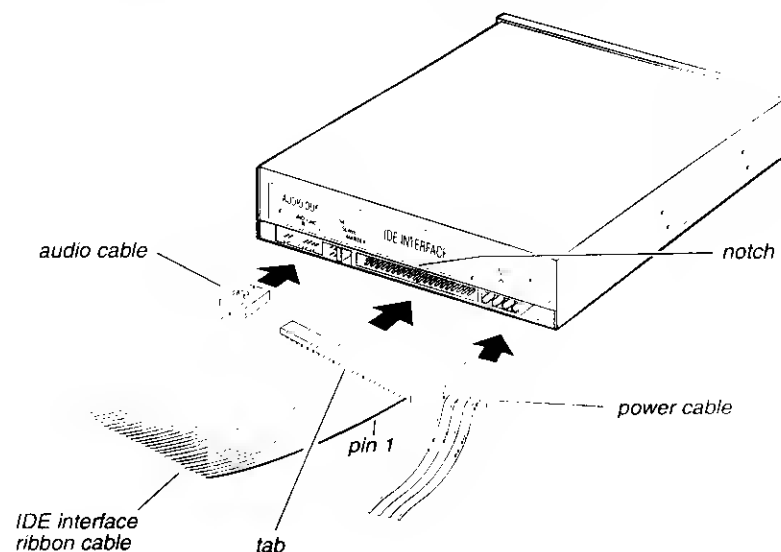

Figure 7. Cable Connections

   4e) Connect one end of the included analog audio cable to the analog audio connector on the rear panel of the CD-RW drive and connect the opposite end to your sound card. **(Go to Step 6.)**

5. **If you have an IDE CD-ROM/DVD drive installed on your system, do the following:**

   Typically, your IDE CD-ROM/DVD drive is connected to the secondary IDE motherboard connector as a Master. In such cases, it is strongly recommended that you connect the CD-RW drive as a Slave drive to the same cable that currently hosts your CD-ROM/DVD drive.

   5a) Set the jumper on the rear panel of the CD-RW drive to Slave.

   5b) Slide the CD-RW drive into the empty 5.25-inch drive bay. Install the CD-RW drive in your personal computer in a horizontal orientation

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TEAC CD-RW Drive User's Manual

(within ±10° of horizontal). The eject button should he located on the right side of the unit. Secure the drive using the included 3x5mm mounting screws.

> **Warning:** *Do not use mounting screws longer than the included 3x5mm screws to secure the CD-RW drive or you may damage the unit.*

5c) Do not use the interface cable that came with your TEAC drive. Instead, connect the CD-RW to the vacant middle connector on your existing CD-ROM/DVD interface cable.

If your original cable does not have an available middle connector, you will need to acquire and install a standard IDE cable with three connectors.

5d) Your CD-ROM/DVD drive probably uses an audio cable that is connected to the computer's sound card. Therefore, there is no need to connect the audio cable that came with your CD-RW drive. This audio cable is not necessary for recording audio CDs. **(Go to Step 6.)**

6. **Connect the power cable to the power connector on the rear panel of the CD-RW drive.**

    Insert the power cable plug in the correct orientation into the power connector. The plug is shaped so that it can he easily inserted in only one orientation; do not force the plug into the connector. The +5v terminal is on the left as you face the rear of the panel; the +12v terminal is on the right. The two center terminals are ground terminals.

7. **Re-install your computer's cover, faceplate, or hay cover.**

8. **Start your system.**

Notes:

- The IDE CD-RW drive is a true Plug-N-Play device; therefore, it will be detected automatically by Windows 95/98/2000-Professional. There is no need to install any drivers.

- Windows NT 4.0 Users:

    Windows NT 4.0 does not support the Plug-N-Play feature. Therefore, confirm that the IDE CD-ROM DRIVE ATAPI version 1.2 driver is installed. If not, open the Control Panel, double click "SCSI Adapters," click the "Drivers" tab, then click the "Add" button. At the "Select a SCSI Adapter Option" window, select "IDE CD-ROM DRIVE (ATAPI Ver 1.2)." Click "Install" and follow the instructions on screen.

- The drive is recognized by the operating system as a typical CD-ROM drive. Once you confirm that you can read (play) data discs from the CD-RW drive, install the Adaptec software to enable recording to CD-R and CD-RW discs. (See Chapter 3 for more information.)

Connecting to Audio Equipment

The CD-RW Drive outputs line-level audio signals from the headphone jack on the front panel. You can connect headphones or external powered speakers here. The headphone jack accepts a 3.5 mm stereo mini-plug. For external powered speakers, connect a stereo adapter to split the output into separate leads for the left and right channels. Such adapters convert a male stereo mini-jack to two female phono jacks.

Alternatively, if you are using a sound card in your PC, you can connect external powered speakers to the audio connectors on the rear panel of the PC.

> **Note:** *If you connect external powered speakers to the sound card (on the rear panel of the PC), monitoring sound via headphones connected to the headphone jack on the front panel will be disabled. In this case, connect the headphones to the speaker.*
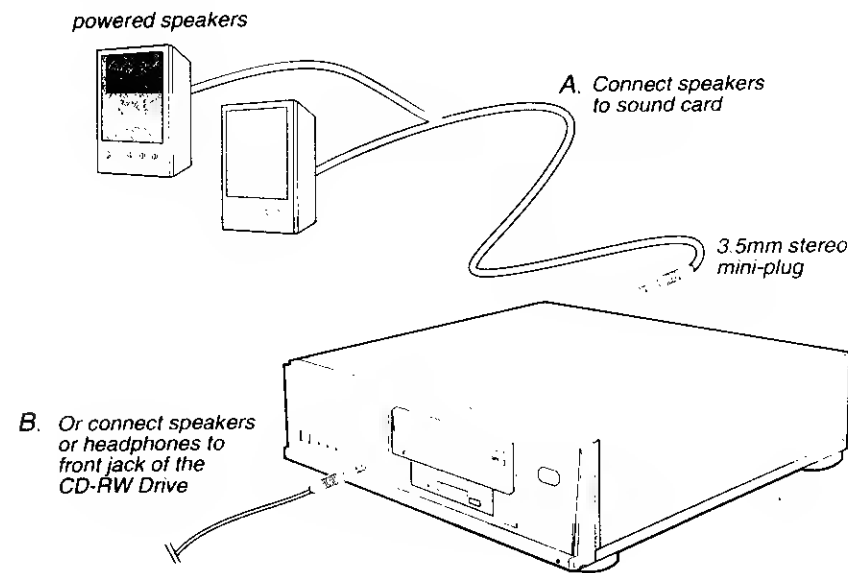

Figure 8. Connecting Analog Audio Speakers or Headphones

Chapter 3. Installing Software

Before you can record data onto CD-R or CD-RW discs using your TEAC CD-RW Drive, you must first install Adaptec CD-R/CD-RW software onto your computer's hard disk.

TEAC CD-RW kits include a CD-ROM that contains the following recording software applications for Windows 95/98/2000-Professional and Windows NT systems.

> *Note: The Adaptec software included in this package will work on systems on which Windows 2000-Professional has been fully installed. It will not work on systems on which Windows 2000 has been installed by updating earlier versions of Windows (i.e., Windows 95/98). This software will not work with Windows 2000 Server and Advanced Server.*

❑ **Adaptec Easy CD Creator, Version 4.02d or higher**

Easy CD Creator is a full-featured premastering software application that enables you to create audio CDs and data CDs.

❑ **Adaptec DirectCD, Version 3.01d or higher**

DirectCD is a "drag & drop" software application that allows you to read and write to your CD-RW as if it were a standard floppy or removable hard drive. It also provides the tools necessary to format the media.

An installation procedure for these applications is provided in "Installing Easy CD Creator and DirectCD Software" on page 14.

Installing Easy CD Creator and DirectCD Software

Note: Before you install any portion of the Adaptec software package, it is strongly recommended that you disable any applications that may be running in the background, including anti-virus software, screen savers, schedulers, etc. This will ensure the proper installation of the Adaptec software. Press CTL-ALT-DEL on your keyboard. The "Close Program" window will display a list of all current programs in memory (Figure 9). With the exception of "Explorer" and "Systray," select each program, then click the "End Task" button. Then proceed with the installation below.
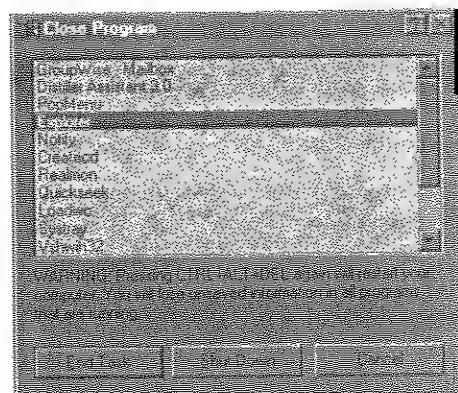

Figure 9. Close Program Window

Follow the steps below to install Easy CD Creator and DirectCD software on your computer's hard disk. The installation procedure for each application is nearly identical.

1. **Insert the TEAC CD-RW software suite CD-ROM (Figure 10) into your computer's CD-ROM drive or into the TEAC CD-RW drive.**
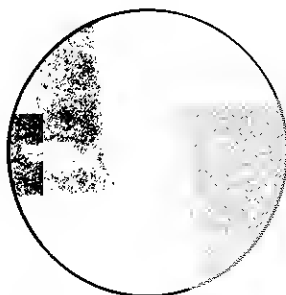

Figure 10. TEAC Adaptec CD-RW Software Suite CD-ROM

If the Autoplay function is enabled, the main installation panel (Figure 11) should appear on your desktop.

If the main installation panel does not appear on your desktop, double-click the My Computer icon, then double-click the icon for the CD-ROM drive.

The system displays the Adaptec Easy CD Creator/DirectCD main installation panel (Figure 11).
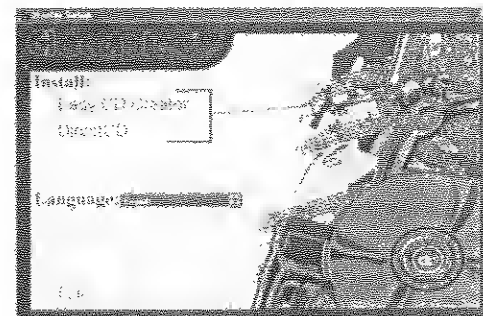
Select the program you wish to install using the left mouse button or press the E or D key.

Figure 11. Adaptec Easy CD Creator/DirectCD Main Installation Panel

2. **If you would like to select a language other than English for the installation procedure, click the** Language: English **button.**

    You can select one of the following languages: Chinese (Taiwan), Chinese (PRC), Dutch, English, French, German, Italian, Japanese, Korean, Portuguese, Spanish, or Swedish. Click the OK button to return to the installation process.

3. **On the main installation panel (Figure 11), click the left mouse button on the name of the application program you wish to install:**

    Select Easy CD Creator or DirectCD drag & drop software. The system begins to install the software and displays the following panel:
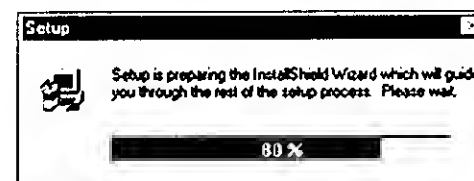

Figure 12. InstallShield Wizard Panel

The system then displays a Welcome panel (Figure 13 on page 16) specific to the application you are installing:
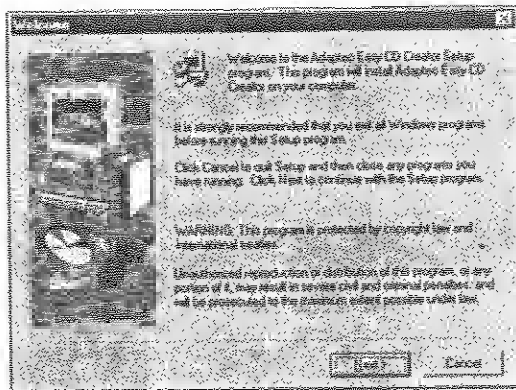
Figure 13. Welcome Panel

> Note: When installing DirectCD, the system will display a message about
> CD-R/CD-RW support (see Figure 14). The TEAC CD-RW supports
> "packet writing." Therefore, click the "Yes" button to install DirectCD.
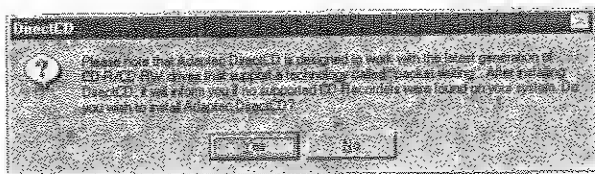

Figure 14. DirectCD Installation Support Warning

4. **Exit all Windows programs, then click the** Next **button.**

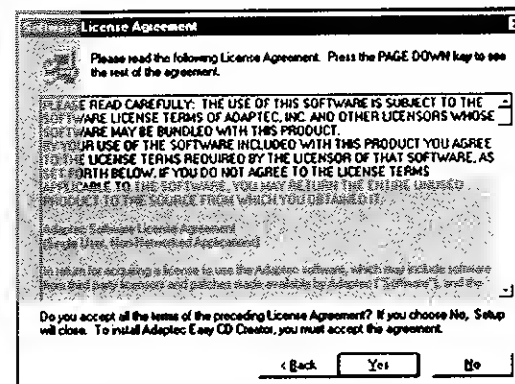The system displays the Software License Agreement (Figure 15).

Figure 15. Software License Agreement Panel

5. **Please read the License Agreement and click** Yes **if you agree to its terms.**

The system displays the Choose Destination Location panel (Figure 16), which lets you specify a directory in which to install the application by first clicking the Browse button. Or, you can accept the default directory.
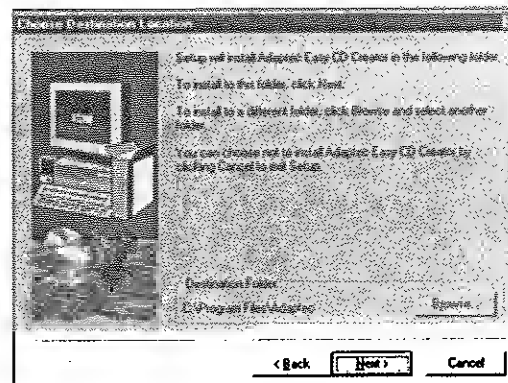

Figure 16. Choose Destination Location Panel

TEAC CD-RW Drive User's Manual

6. **Click** Next.

    The system continues to install the application and very briefly displays a panel similar to the following:

    (will read "DirectCD" when you install that application)

    Figure 17. Installation in Progress Panel

    The system quickly displays a sequence of panels as the installation proceeds, pausing at the following Setup Complete panel (Figure 18):
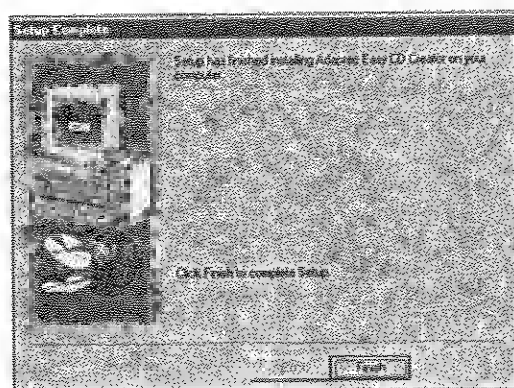

    Figure 18. Setup Complete Panel

7. **Click the** Finish **button to conclude the setup.**

The system again displays the main installation panel (Figure 19):
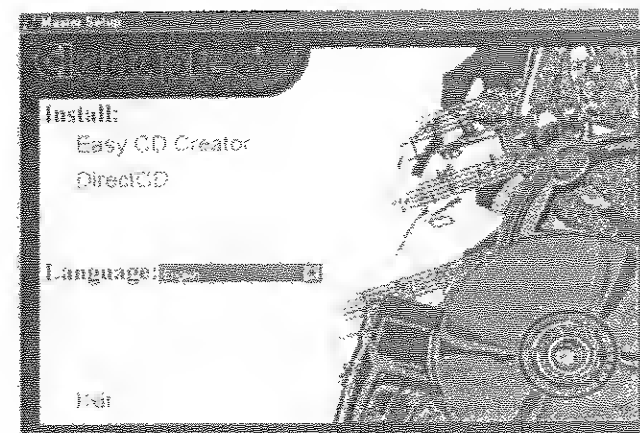
Figure 19. Main Installation Panel

8. **Do one of the following:**
    ❏ If you wish to continue and install another program (e.g., Easy CD Creator or DirectCD), return to Step 3 on page 15.
    ❏ If you have installed all programs, or if you wish to use the program you just installed immediately, click the Exit button.

    The system displays a Setup Complete panel:

    Figure 20. Reboot System Request Panel

9. **Click the** Finish **button to restart your system.**

    Once the system reboots, the application(s) you installed will be ready for use.

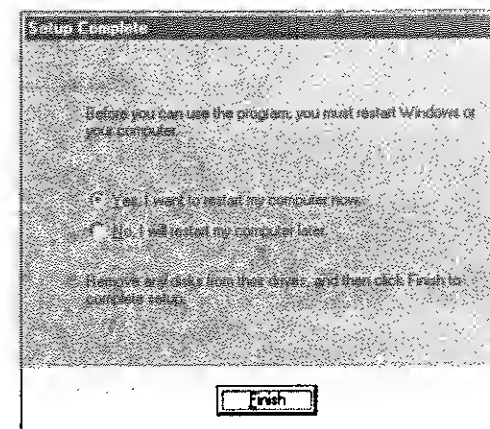## About the Reference Guides, ReadMe Files, and Help Files

For detailed information on Easy CD Creator and DirectCD, refer to the Reference Guides (Acrobat PDF files) included on the CD-RW software suite CD-ROM

(Adobe Acrobat Reader 4.0 is also included on the CD-ROM and loads automatically.)

Also, be certain to review the ReadMe files for Easy CD Creator and the Help files for DirectCD.

These PDF files comprise the user documentation for the applications. The files are titled:

- *Adaptec Easy CD Creator Quick Reference Guide (16 pages)*

  You can open this guide by selecting:

  Start-->Programs-->Adaptec Easy CD Creator 4-->Quick Reference Guide

  You can access the ReadMe file by selecting:

  Start-->Programs-->Adaptec Easy CD Creator 4-->ReadMe

- *Adaptec DirectCD Reference Guide (12 pages)*

  You can open this guide by selecting:

  Start-->Programs-->Adaptec DirectCD -->Reference Guide

  You can access the Help file by selecting:

  Start-->Programs-->Adaptec DirectCD -->DirectCD Help

About Online Registration

There is no need to register any portion of this kit. TEAC provides 100% support for the drive and the Adaptec software. Refer to "Appendix C. Technical Support" on page 28 if you wish to contact TEAC.

About Web Checkup

Web Checkup is primarily a feature of the Easy CD Creator Deluxe Version software. The Adaptec software bundled with the TEAC CD-RW kit is a "standard" version. Therefore, the Web Checkup feature will not work unless you eventually upgrade to the Deluxe version. For now, you may disable this feature.

Starting Easy CD Creator

To start Easy CD Creator, follow these steps:

1. **Click the left mouse button on the Windows** Start **icon, and select from the pop-up menu:** Programs-->Adaptec Easy CD Creator 4-->CreateCD.

   The system displays the Welcome panel for Easy CD Creator (Figure 21), which enables you to create audio or data discs, as well as perform other related functions. (Alternatively, you can double-click the Create-CD shortcut on the desktop.)
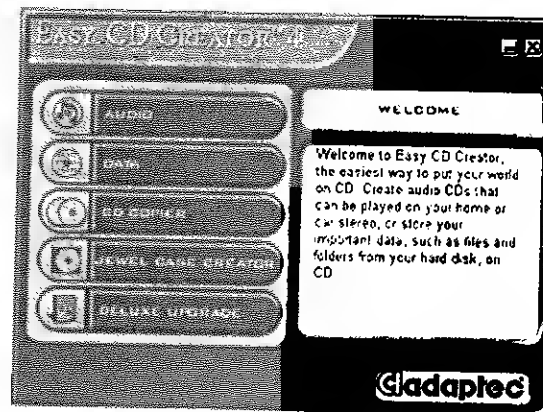

Figure 21. Easy CD Creator Welcome Panel

Using Easy CD Creator

The Welcome panel for Easy CD Creator enables you to:

- ❑ Create audio discs
- ❑ Create data discs
- ❑ Use CD Copier to copy discs (additional CD-ROM or DVD-ROM drive required)
- ❑ Use Jewel Case Creator to help you design and print jewel case cover art
- ❑ Upgrade to a deluxe version of Easy CD Creator

For information on using Easy CD Creator, refer to the Quick Reference Guide in PDF format on the CD-ROM or to the ReadMe file (for more information, see "About the Reference Guides, ReadMe Files, and Help Files" on page 20).

Starting DirectCD

To start DirectCD, follow these steps:

1. **Click the left mouse button on the Windows** Start **icon, and select from the pop-up menu:** Programs-->Adaptec DirectCD-->Adaptec DirectCD Wizard. (Alternatively, you can double-click the Create-CD shortcut on the desktop, then click the Data button, and then click DirectCD.)

   The system displays an introductory screen for DirectCD Wizard (Figure 22), which will guide you through:

   ❏ Checking the status of a disc in the CD-RW drive

   ❏ Preparing a CD-R or CD-RW disc for reading or writing

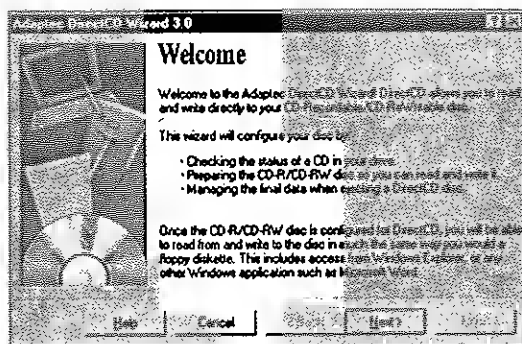   ❏ Managing the final data when ejecting a DirectCD disc.

Figure 22. DirectCD Wizard

Using DirectCD

For information on using DirectCD, refer to the user documentation in PDF format on the CD-ROM or to the Help file (see "About the Reference Guides, ReadMe Files, and Help Files" on page 20).

You may also access Help information by clicking the Help button on the DirectCD Wizard Panel (Figure 22).

Uninstalling Programs

• To uninstall Easy CD Creator, select:

   Start-->Programs-->Adaptec Easy CD Creator 4-->Uninstall.

• To uninstall Easy CD Creator, select:

   Start-->Programs-->Adaptec DirectCD-->Uninstall DirectCD.

   The system displays the Control Panels window. Use the Add/Remove Programs utility. For additional information, refer to your Windows documentation.

• You can uninstall both programs from the Add/Remove Program object in the Control Panel.

Appendix A. About CD-R and CD-RW Discs

This appendix explains how to handle, load, and eject CD-R and CD-RW discs. It also lists recommended media and supported disc formats.

Handling Discs

❑ Handle compact discs only by their edges to avoid getting fingerprints on the surface. Do not touch the disc's data surface (unlabeled side).

❑ Do not place discs in direct sunlight, or in locations subject to high humidity, high temperatures, or dusty conditions.

❑ If cleaning the disc becomes necessary (erratic operation or visible dust or smudges), gently wipe the surface of the disc from the surface to the outside edge. Do not use benzene, alcohol, thinner, or other solvents.
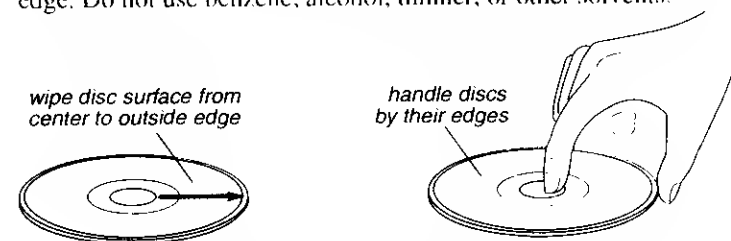
wipe disc surface from
center to outside edge

handle discs
by their edges

Figure 23. How to Handle Compact Discs (CD-R and CD-RW)

Recommended Media

One blank TEAC CD-R disc and one CD-RW rewritable disc are included in the package with your CD-RW.

Use only 74 or 80-minute blank CD-R and CD-RW media from TEAC or the following manufacturers:

Disc Type	Manufacturer
CD-R	Taiyo Yuden
	Mitsui Toatsu Chemical
	Mitsubishi (Verbatim)
	Ricoh
	TDK Electronics
	Kodak
	Fuji Film
	Hitachi (Maxell)
	Pioneer
	Sony
	Maxell
	PVC

Disc Type	Manufacturer
CD-RW	Mitsubishi (Verbatim)
	Ricoh

Note: *Additional TEAC media may be purchased online at www.shopteac.com.*

Disc Formats

The TEAC USB CD-RW drive supports the following disc formats:

Disc Formats	Data Capacity
CD-DA	74 or 80 minutes
CD-ROM Mode 1	650MB or 700MB
CD-ROM XA Mode 2 (Form 1)	650MB or 700MB
CD-ROM XA Mode 2 (Form 2)	738MB or 794MB
CD-R	650MB or 700MB
CD-RW	650MB or 700MB
CD-I	650MB or 700MB
Video-CD	650MB or 700MB
CD Extra/CD-Plus	650MB or 700MB
CD-TEXT	650MB or 700MB
Multi-session Photo CD	650MB or 700MB

Loading and Ejecting Discs

To load a disc, first open the disc tray by pressing the Eject button on the front of the drive. Place the disc on the disc tray with its label side facing up. Then press the Eject button again to retract the disc tray back into the drive.

To eject a disc, press the Eject button on the front of the drive to extend the disc tray (refer to Figure 24). Remove the disc from the disc tray and place it in its protective case. Then press the Eject button again to retract the disc tray back into the drive.
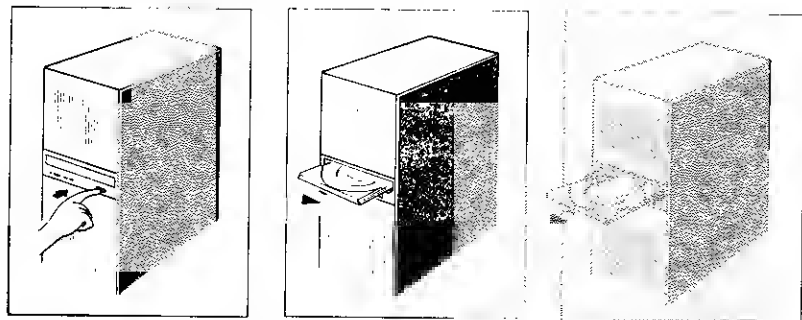

Figure 24. Ejecting the Disc Tray

Appendix B. Specifications

The following table lists the product specifications for the TEAC CD-RW drive.

Model	CD-W512E
Interface	IDE/ATAPI
Transfer Rate	Write: 12X (1.8MBps) Rewrite: 10X (1.5MBps) Read: 32X maximum (4.8MBps)
Digital Audio Extraction Rate	14X ~ 20X max.
Access Time	85 msec (1/3 Stroke)
Buffer Size	4MB
Write Methods	Track At Once; Disk At Once; Multi-Session; Incremental
Write Verification	Running Optimum Power Control to dynamically adjust laser write power
Logical Recording Format	ISO9660, UDF & CDR-FS Packet Write
CD Formats Supported	CD-DA; CD-ROM Mode-1, CD-ROM XA Mode-2 (Form-1 and 2); Multi-session PhotoCD; CD-ROM XA; CD-R, CD-RW; CD-I; Video CD; CD Extra/CD Plus, CD Text.
Disc Loading	Power Tray (caddy not required)
Front Panel	Built-in Headphone Jack, Dual Status LEDs, Volume Control Knob, and Power Eject Button
MTBF	100,000 POH
Dimensions	5.75"(W) x 1.63"(H) x 7.56"(D)
Weight	2.65 lbs.
Power Supplies	+5VDC, +12VDC
Analog Audio Headphone Line-Out	0.65 ± 0.3Vrms at 32Ω 0.78 ± 0.3Vrms at 47KΩ
Headphone Jack	3.5mm diameter stereo mini-headphone jack
Installation	Horizontal, plus or minus 10°
Operating Temperature	5° C to 40° C (41° F to 104° F)
Storage Temperature	-30° C to 60° C (-22° F to 140° F)
Operating Humidity	20% to 80% (non-condensing)
Storage Humidity	10% to 80% (non-condensing)
Safety Standards	UL, CSA, TUV

Appendix C. Technical Support

For technical support, please contact the TEAC Service and Support Center nearest you:

North America:
TEAC America, Inc. (USA)
Technical Support
Telephone: (323) 727-4860 • Fax: (323) 869-8751
Monday - Friday 8:00 a.m. - 5:00 pm
http://www.teac.com/dsp/new-dsp.html
E-mail: dspdtsg@teac.com

Europe:
TEAC Deutschland GmbH ICP Division (Germany)
Bahnstraße 12
D-65205 Wiesbaden-Erbenheim
Germany
Telephone: (611) 71-580 • Fax: (611) 71-5892 • BBS: (611) 71-5851
http://www.teac.de • E-mail: support@ja.teac.de

TEAC UK Ltd.
5 Marlin House
Croxley Business Park
Watford, Hertfordshire WD1 8YA
Telephone: (0923) 225235 • Fax (0923) 236290

TEAC France S.A.
17, rue Alexis de Tocqueville
CE 005 - 92182 ANTONY CEDEX
Telephone: (1) 42-37-01-02
Fax: (1) 42-37-65-45

Japan, Asia, Middle East:
TEAC Corporation, 3-7-3 Nakacho,
Musashino-shi, Tokyo 180-0006 Japan
Field Service and Technical Support Section
Data Storage Products Sales and Marketing Division
Telephone: (0422) 52-5048
Fax-on-Demand (24 hours): (0422) 55-2554
BBS: (0429) 62-7498
       (8 bit; 1 stop bit; no parity. Downloaded files compressed hy LHA.)
http://www.teac.co.jp

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